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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,452	03/09/2004	Yoshito Nakamura	12844.0068US01	2403
23552	7590 07/26/2005	•	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903			NOORI, MAX H	
MINNEAPOLIS, MN 55402-0903			ART UNIT	PAPER NUMBER
	,		2855	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/796,452	NAKAMURA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Max Noori	2855				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on <u>08 Je</u>	<i>ıly</i> 2005.					
2a) This action is <b>FINAL</b> . 2b) ⊠ This	action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)  Claim(s) 1-6 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed.  6) □ Claim(s) 1-6 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
<ul> <li>9) The specification is objected to by the Examiner.</li> <li>10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> </ul>						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date</li> </ol>	4) Interview Summary Paper No(s)/Mail D: 5) Notice of Informal F 6) Other:					

Application/Control Number: 10/796,452

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## **DETAILED ACTION**

1. The finality of the previous office action is withdrawn in view of the newly found prior art. This action is a Non-final action.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-6, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nonomura et al., in view of either of Yagi et al., or Sezaki et al.

Nonomura et al., discloses a magetostriction-type torque sensor including a shaft (element 10) made of a ferromagnetic material, an exciting coil (element 16), a detection coil (element 30) for detecting a change in a magnetic field and yoke (element 44) provided around outer peripheries of the coils and a magnetic casing function as a shield. Nonomura et al., doe not show a magnetostrictive film. However, the use of such film on shaft torque measuring devices is notoriously known. Either of Yagi et al., or Sezaki et al., is presented to show such film arrangement around a shat. Therefore, it would have been obvious for a skilled artisan at the time of the invention to modify Nonomura et al., to provide a magnetostrictive film around the shaft for the known purpose of the stimulation and the enhancement of the magnetic field and, as a result to obtain a more accurate measurement system.

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Regarding claim 2, the cited Yagi et al., or Sezaki et al., show the use of similar magnetic material.

Regarding claim 3, a distance is provided between the shield and the yoke portion.

Regarding claim 4, the casing (element 42) is parallel to the shaft.

Regarding claim 5, the sensor presented in the cited art can be used for any desirable intended application.

Regarding claim 6, the supporting yoke (element 44) is around both coils (see figure 19).

## Response to Amendment

- 4. Applicant's amendment and arguments filed 7/8/5 have been fully considered. The argument and the amendment are most in view of the new ground of the rejection.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Max H. Noori whose telephone number is (571) 272-2185. The examiner can normally be reached on Tuesday-Friday from 8:00 AM to 6:00 PM.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The central fax number is (703) 827-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**MHN** 

Tuesday, July 19, 2005

MAX NOOR! PRIMARY EXAMINER